

## Mechanical Valves: 4-Way Spool Valves

### Directair 2 Series (1/8" NPT) & Directair 4 Series (1/4" NPT)

Vacuum to 150 PSI

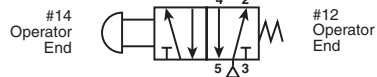
1/8" - 0.20 C<sub>v</sub>

1/4" - 0.83 C<sub>v</sub>

#### Button Operated

W 41041 1000 1/8 npt, Button Operated, Spring Return

W 52041 1000 1/4 npt, Button Operated, Spring Return



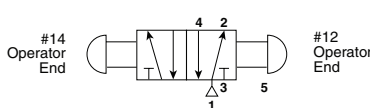
41041 1000

52041 1000

#### Button Operated

W 41093 1000 1/8 npt, Button Operated, Manual Return

W 52043 1000 1/4 npt, Button Operated, Manual Return



41093 1000

52043 1000

#### Spring Return

Normal Position – Pressure at Inlet port 1 is connected to Outlet port 2. Outlet port 4 is connected to Exhaust port 5.

Actuated Position – Pressure at Inlet port 1 is connected to Outlet port 4. Outlet port 2 is connected to Exhaust port 3.

#### Manual Return

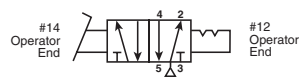
Operated pulled last – Pressure at Inlet port 1 is connected to Outlet port 2. Outlet port 4 is connected to Exhaust port 5.

Operated pushed last – Pressure at Inlet port 1 is connected to Outlet port 4. Outlet port 2 is connected to Exhaust port 3.

#### Pedal & Treadle Operated

W 52071 1000 1/4 npt, Pedal Operated, Spring Return

W 52093 1000 1/4 npt, Treadle Operated, Detented



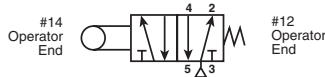
52093 1000

52071 1000

#### Roller Operated

W 41021 1000 1/8 npt, Roller operated, Spring Return

W 52021 1000 1/4 npt, Delrin Roller operated, Spring Return



41021 1000

52021 1000

#### Treadle

Toe pressed last – Pressure at Inlet port 1 is connected to Outlet port 2. Outlet port 4 is connected to Exhaust port 5.

Heel pressed last – Pressure at Inlet port 1 is connected to Outlet port 4. Outlet port 2 is connected to Exhaust port 3.

#### Roller

Normal Position – Pressure at Inlet port 1 is connected to Outlet port 2. Outlet port 4 is connected to Exhaust port 5.

Actuated Position – Pressure at Inlet port 1 is connected to Outlet port 4. Outlet port 2 is connected to Exhaust port 3.



#### CAUTION:

This valve shall not be used to actuate a punch press.  
Do not use this valve on punch presses or press brakes.

Note: For conversion factors see page 54

## Mechanical Valves: 4-Way Spool Valves

### Directair 2 Series (1/8" NPT) & Directair 4 Series (1/4" NPT)

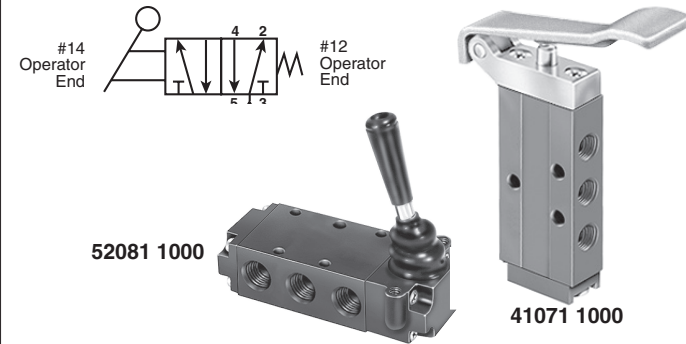
Vacuum to 150 PSI

1/8" - 0.20 C<sub>v</sub>      1/4" - 0.83 C<sub>v</sub>

#### Lever/Hand Operated

W 41071 1000 1/8 npt, Hand Lever Operated, Spring Return

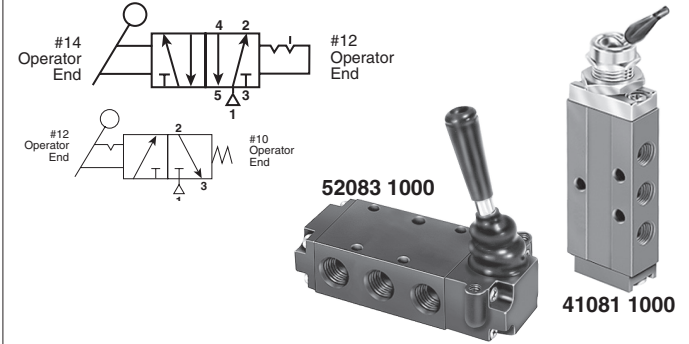
W 52081 1000 1/4 npt, Lever Operated, Spring Return



#### Lever Operated

W 41081 1000 1/8 npt, Detented Toggle, Spring Return

W 52083 1000 1/4 npt, Lever Operated, Manual Return



#### Spring Return

Normal Position – Pressure at Inlet port 1 is connected to Outlet port 2. Outlet port 4 is connected to Exhaust port 5.

Actuated Position – Pressure at Inlet port 1 is connected to Outlet port 4. Outlet port 2 is connected to Exhaust port 3.

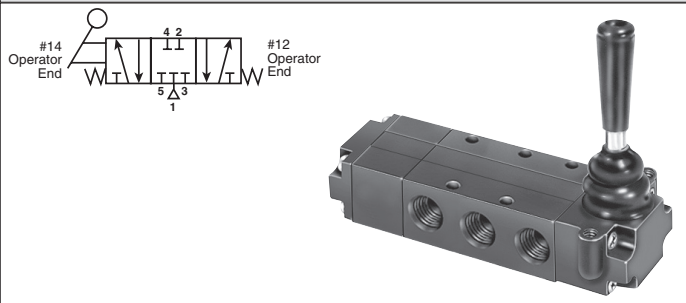
#### Manual Return

Operated pushed last (toward body) – Pressure at Inlet port 1 is connected to Outlet port 2. Outlet port 4 is connected to Exhaust port 5.

Operated pulled last (away from body) – Pressure at Inlet port 1 is connected to Outlet port 4. Outlet port 2 is connected to Exhaust port 3.

#### Lever Operated, 3-Position

W 52181 1000 Lever, Operated Spring Centered  
Type 1, Closed Center Spool



#### Spring Centered, 3-Position

Lever Pulled (away from body) – Pressure at Inlet port 1 is connected to Outlet port 4. Outlet port 2 is connected to Exhaust port 3.

Lever Pushed (toward body) – Pressure at Inlet port 1 is connected to Outlet port 2. Outlet port 4 is connected to Exhaust port 5.

Centered Position – Type 1: All ports blocked.

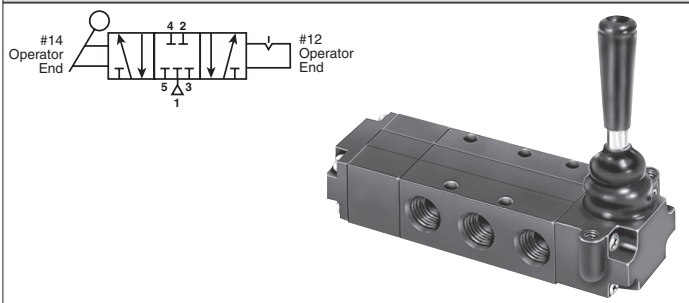
Other Center Positions are available from stock

Type 2: Pressure center

Type 3: Exhaust center

#### Lever Operated, 3-Position

W 52183 1000 Lever, Operated Detented  
Type 1, Closed Center Spool



#### Detented, 3-Position

Lever Pulled (away from body) – Pressure at Inlet port 1 is connected to Outlet port 4. Outlet port 2 is connected to Exhaust port 3.

Lever Pushed (toward body) – Pressure at Inlet port 1 is connected to Outlet port 2. Outlet port 4 is connected to Exhaust port 5.

Centered Position – Type 1: All ports blocked.

Other Center Positions are available from stock

Type 2: Pressure center

Type 3: Exhaust center

Note: For conversion factors see page 54

